RS-8410-01
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IL-0327-11

SINCLAIR AND VALENTINE

DATE July 13, 1984

TO Mike McNamara

FROM Bruce Marx

SUBJECT CHICAGO TANK FARM

An underground tank farm consisting of 7 units (2 X 5,000 gallons and 5 X 3,000 gallons) is a part of the Chicago expansion plans. After reviewing bids received from tank fabricators, I have selected Chicago Boiler as the source of the units. I am enclosing a copy of the quotations along with the specifications and warranty. Basically the tanks will be coated on the exterior with a polyurethane coating and be dielectrically protected from electrolytic corrosion.

I am also receiving bids from several companies on the installation of these units. All of these construction companies have had extensive experience in installation of solvent tanks in the ink industry. Whichever installer we select will secure permits and provide shop drawings for our records.

The materials to be stored are as follows:

Magee Oil	2 X 3,000 gallons
Ethanol	5,000 gallons
Ethyl Acetate	5,000 gallons
MEK	3,000 gallons
Acetone	3,000 gallons
N-Propyl Acetate	3,000 gallons

I would appreciate your review and comments on the tank specifications and will forward installation plans when received.

Bruce Marx

Bruce Marx

BM:hls

cc: B. Baddeley
R. Drusch
M. Gallisdorfer
M. Jordan
M. Murphy

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JULY 6, 1984

• SINCLAIR & VALENTINE
4101 S. PULASKI
CHICAGO, IL. 60632
254-3353

QUOTATION

Attention : BRUCE MARX

Gentlemen: Your Inquiry

We are pleased to submit quotation on our interpretation of your requirements, subject to terms and conditions printed on reverse side of this proposal.

2- 5000 GAL. CAPACITY HORIZ. U/G STORAGE TANKS 8'-0" DIA. x 14'-0" LONG, OFFSET CONSTRUCTION, ¼" MATERIAL THRU-OUT, FLAT FLANGED HEADS, 0# W.P. 5# AIR TEST, 6 OR LESS 4" OR SMALLER THREADED OPENINGS, STIP3 CORROSION CONTROL SYSTEM INSTALLED PRIOR TO COATING WITH POLYURETHANE (CORROCOTE II APPROVED COATING) 6 OR LESS 4" OR SMALLER THREADED OPENINGS THE LARGE OPENINGS WOULD BE 5" WITH A 5" x 4" DIELECTRIC BUSHING THE SMALL OPENING WOULD BE 2½" WITH 2½ x 2" DIELECTRIC BUSHING. THE TANKS WOULD BE CATHODICALLY PROTECTED WITH SACRIFICIAL ZINC ANODES - THIS SYSTEM PROVIDES A LIMITED 20 YEAR WARRANTY (SEE SAMPLE WARRANTY) U/L U/G LABEL STIP3 LABEL

EACH $2,950.00

5- SAME AS ABOVE ONLY 3000 GALLON CAPACITY, 64" DIA. x 18'-0" LONG FABRICATED FROM # 7 GA. STEEL

EACH $2,000.00

ABOVE PRICES SUBJECT TO 8% TAX IF APPLICABLE

DELIVERY: FOLLOWING RECEIPT OF P.O. AND APPROVED DRAWINGS.

F.O.B. TRUCK CHICAGO JOBSITE Delivery 3 TO 4 WEEKS Terms NET 30 DAYS ON APPROVED CREDIT

We deeply appreciate the privilege of submitting this proposal and hope for your favorable consideration.

Yours very truly,

CHICAGO BOILER COMPANY

Ray Graffia

RAY GRAFFIA

RG;mtp

INSTALLATION INSTRUCTIONS

UNDERGROUND STEEL STORAGE TANKS WITH **sti-P$_3$**® CORROSION CONTROL SYSTEM

1. The excavation shall be free from material that may cause damage to the tank coating. (Care shall be taken during installation that foreign matter is not introduced into the excavation or backfill.)

2. The bottom of the excavation shall be covered with clean sand or gravel to a depth of one foot, suitably graded and leveled.

3. The excavation shall extend a distance of at least one foot around the perimeter of the tank.

4. An air test of the tank aboveground is recommended. Pressure should not exceed 5 pounds per square inch (PSIG) while a soap solution is applied to weld seams.

5. Before placing the tank in the excavation, all dirt clods and similar foreign matter shall be cleaned from the tanks, and areas of coating damage shall be repaired with a suitable coating.

6. Equipment to lift the tank shall be of adequate size to lift and lower the tank without dragging and dropping to ensure no damage to the tank or the coating.

7. Tanks shall be carefully lifted and lowered by use of cables or chains of adequate length (not less than 45 included angle) attached to the lifting lugs provided. A spreader bar should be used where necessary. **Under no circumstances use chains or slings around the tank shell.**

7.1 After an **sti-P$_3$**® tank has been placed in the excavation, the anode lead-wire attachment to the tank shall be checked to assure this connection has not been damaged. Where damaged, the connection must be reestablished in strict accordance with **sti-P$_3$**® specifications.

8. Where anchoring by means of a concrete slab is required, the tank must not be placed directly on the pad. A layer of fine or pea gravel, sand or No. 8 crushed stone (No. 8 coarse aggregate ASTM-448) at least 6 inches deep must be spread evenly over the dimensions of the pad to separate the tank from the pad. The tank shall not be placed on any other hard or sharp material that can cause deformation of the tank or damage to the coating.
8.1 If installation area is in a tidal area, the tank "bedding" material should be fine gravel or pea gravel, rather than sand.

9. Special care should be exercised when installing hold down straps to ensure that the straps are separated from the tanks by separating pad made of an inert insulating dielectric material. The separating pad should be at least 2 inches wider than hold down straps' width and must be carefully placed anywhere on the tank where hold down straps would come into direct contact with the tank shell.

10. Backfill consisting of clean sand, gravel or other non-corrosive inert materials shall be placed along bottom sides of tank by hand shoveling and tamping to ensure that the tank is fully and evenly supported around bottom quadrant.

11. The backfill shall be deposited carefully around tank and to a depth of at least one foot over tank to avoid damage to coating especially where tamping is required. (See NFPA 30 and state or local codes for depth of cover required.)

12. Where air or hydrostatic testing is required after installation, it is recommended that the pressure applied shall not be in excess of 5 pounds per square inch (PSIG) as measured at the top of the tank.

13. The plugs at unused tank openings shall be removed, a pipe compound shall be added and the plugs shall be reinstalled in the unused openings.

13.1 The di-electric bushings in **sti-P$_3$**® tanks shall not be removed from the unused openings. The plugs in tank openings which are to be used should not be overtightened as this may cause the bushing to unscrew with the plug. Care shall be taken not to crossthread or damage the nonmetallic bushings when replacing plugs or installing required tank piping.

This information furnished as a service of a Steel Tank Institute member.

sti-P$_3$® Limited Warranty

Each steel storage tank designed for underground storage purposes, fabricated in accordance with the applicable specifications, by a duly authorized licensee of the Steel Tank Institute, an Illinois not-for-profit corporation, and bearing the "sti-P$_3$®" trademark label and embossed nameplate showing the "sti-P$_3$®" series number, is warranted by the Licensee whose name appears below against non-corrosion failure due to defective materials and workmanship, for a period of one (1) year after date of delivery of the tank to the purchaser and by the Steel Tank Institute ("STI") against leaks due to structural failure which shall be defined as cracking, breaking or collapse for the life of the installation. Each such limited warranty is subject to the following conditions:

1. The tank must be properly vented.

2. The obligation of the warrantors under this warranty is limited to repairs of the original tank or delivery to the same installation site of a replacement tank of approximately the same size, design, quality of material and workmanship as the original tank, at the option of the warrantor.

Each such tank, as described above, is warranted against failure due to exterior corrosion caused by reaction of the tank with its soil environment, for a period of twenty (20) years from date of delivery of the tank to the purchaser. Each such limited warranty is subject to the following conditions:

1. Electrical conductivity of soil environment at the installation site must not be less than 2000 ohm/cm resistivity. Any such tank installed with zinc anodes shall not be subject to the conditions contained in this first paragraph.

2. Non-conductive bushings or flanges furnished in the tank openings must be used for all connections of the piping system to the tank.

3. The obligation of the warrantors under this warranty is limited to the delivery to the same installation site of a replacement tank of approximately the same size, design, quality of material and worksmanship as the original tank, and the purchaser shall pay for the replacement tank on a prorated basis according to the period of time that has elapsed since the delivery of the original tank, as follows:

   First 10 years-no charge.

   From the first to the last day of the eleventh year-10% of the then current price of the replacement tank.

   Twelfth year-20% and an additional 10% each succeeding year until twentieth year when purchaser will be charged 90% of the then current price of the replacement tank.

4. Any sti-P$_3$® tank installed with zinc anodes must be monitored in accordance with specifications relating to such tanks.

Each such limited warranty, relating to both structural strength and exterior corrosion, shall be subject to the following conditions:

1. The tank must be installed in accordance with sti-P$_3$® installation instructions and NFPA 30, API 1615 or prevailing state or local codes. This limited warranty applies to the original installation only.

2. In the event of tank failure or leak covered by this limited warranty, the purchaser must promptly inform STI so as to permit a claim agent chosen or approved by STI to inspect the tank site prior to or during excavation and the tank after it is excavated. The purchaser shall confirm to STI such notice in writing.

3. The warrantors shall not be liable for labor or other installation costs of any replacement tank furnished in accordance with the terms of this limited warranty.

4. The warrantors shall not be liable for failure of the piping system connected with any tank, nor for any consequential damages to person or property resulting from, or attributed to, the failure of any tank or the connecting piping system, regardless of cause of failure.

5. Some states do not allow the limitation of implied warranties or the exclusion of incidental or consequential damages, so the above limitation or exclusion may not apply to you, if you are a "consumer."

6. This warranty gives you specific legal rights and you may also have other rights which may vary from state to state, if you are a "consumer."

7. THE FOREGOING LIMITED WARRANTY IS THE ONLY LIMITED WARRANTY MADE. NO OTHER LIMITED WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, AND ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE WHICH EXCEED THE AFORESTATED OBLIGATIONS ARE HEREBY DISCLAIMED BY THE WARRANTORS AND EXCLUDED FROM THIS AGREEMENT OF LIMITED WARRANTY.

LICENSEE

Company _____

By _____

Its _____
(Title) Authorized Representative

_____
Chairman, sti-P$_3$® Executive Committee

sti-P$_3$® Tank Series No. _____

Date of Delivery: _____

Attest: _____
Secretary, sti-P$_3$® Executive Committee